

TechConnect Ventures

Sprint Challenge Brief:

Portable, low footprint devices for detecting toxic synthetic chemicals

Sprint Submissions Closed

DESCRIPTION

In collaboration with a Non-Profit Leader in R&D collaboration management, TechConnect Ventures is seeking novel, portable sensing devices capable of detecting toxic synthetic chemicals, such as chemical warfare agents.

Innovators from every sector are invited to submit a response, including – but not limited to – industry, national labs, non-profits, consultants, start-ups, small business and medium to large corporations.

OPPORTUNITY

Top technologies will be considered for both current and future development, funding, licensing and acquisition opportunities. The Sprint Sponsor may also consider select responses for additional support, coaching and/or matching of technologies to future technology development needs and opportunities within its portfolio of corporate and government funding programs.

TechConnect Top Innovators: TechConnect may select one or more highly impactful responses ("Top Innovators") to participate in an upcoming TechConnect Conference, Expo, Showcase, or Virtual Pitch Event.

BACKGROUND

Detection of chemical warfare agents is essential for the safety of military, and increasingly, civilian personnel. There are many aspects to effective detection, and successful protection, such as rapid detection at low concentrations, accuracy, selectivity, efficient monitoring of spread, and quick recovery time. For field applications, a small portable unit that can be rapidly deployed and moved around to areas of concern is critical. However, many of the current technologies available for chemical warfare detection involve large and complicated instrumentation that can be challenging to operate while interpreting measurements through various spectroscopic, colorimetric, and/or ionization-based methods.

The objective of this request is to identify technologies and other alternative solutions that can quickly detect and identify chemical warfare agents with a solution that is portable, easy to operate, and straightforward to interpret.

INNOVATION REQUIREMENTS

Submissions describing technologies at every stage from concept through commercial product are invited. Ideal technologies will address any or all of the following requirements:

1. Detect one or more of the following:
 - a. Nerve agents
 - b. Blister agents
 - c. Cyanogenic agents
 - d. Pulmonary agents
 - e. Other hazardous synthetic agents, warfare agents, chemicals or toxins
 - i. Solvers please specify in your response
2. Provide rapid response (less than 60 seconds)
3. Small footprint (compatible with either small vehicle mounted or handheld operation)
4. Durable enough for outdoor use and transportation over rough terrain
5. Compatible with continuous, long-term use (up to 8 hours or more)
6. Resists interference from environment and other analytes
7. Emphasizes ease of set-up, ease of use and user convenience

TechConnect and the client acknowledge that highly viable sensing capabilities and devices may exist for other, unrelated chemical applications in addition to those of chemical warfare agents listed above. **Responses featuring such technologies are of considerable interest, as well. However, submissions describing these technologies should seek to address any research, development or optimization that would be required to adapt the existing technology for the clients intended application and analytes.**

POTENTIAL SOLUTIONS

Technologies of interest for this Sprint include, but are not limited to:

- Handheld devices
- Miniaturized devices
- Vehicle mounted detection equipment
- Drone, UAV or ROV-mounted equipment
- Printed or wearable sensors
- Mobile device-integrated solutions
- Solutions linked to aerial surveillance mechanisms

REMEMBER... We don't know what we don't know!

If your technology is not highlighted above, please consider submitting a response in order to enhance your exposure to new commercial opportunities.

SUBMISSION REQUIREMENTS

All Submissions must include a completed Submission Webform. Submit only NON-CONFIDENTIAL information

Within the Submission Webform your Entry should address the Problem Statement through the following:

- A non-confidential summary of your technology or innovation, including any technical data and details on performance as it applies to the Problem Statement
- Value proposition and (potential) commercial impact
- Development status and readiness level
- Development and scale-up pathway (if available)
- Intellectual property position
- Funding and award status (if applicable)
- Type of partnership or commercial relationship sought with Innovation Seekers
- Company or organizational profile
- Contact, team and organizational information

Respondents are also invited to upload one (1) supplemental file (max. size 10MB) containing their unique technology pitch, presentation or overview.

EVALUATION

TechConnect Ventures and its client will evaluate all responses. Based on the nature of the innovation and strength of the response relative to all submissions received, top innovators may be selected for further discussions or pitches which may lead to contractual or commercial engagements for the research, development or commercialization of the most promising technologies

QUESTIONS?

Contact info@techconnectventures.com and reference the Sprint Topic.

PARTICIPATION RULES & GUIDELINES

Solvers are encouraged to review the Rules and Guidelines provided on the Sprint page for details about participation, including submission criteria, eligibility information, and more.

QUESTIONS? Contact Executive Director, Nick Kacsandi at info@techconnectventures.com